

STATE OF SOUTH DAKOTA CLASS SPECIFICATION

Class Title: Print Shop Technician

Class Code: 21022

A. Purpose:

Operates and maintains offset duplex or simplex presses and complex or digital duplicating equipment to produce a variety of printed materials.

B. Distinguishing Feature:

Print Shop Technicians operate the complex printing and duplicating equipment that requires setting several controls to obtain the appropriate printed image, and they produce printing plates. Duplication/Bindery Equipment Operators set up and operate duplication and binding equipment.

C. Functions:

(These are examples only; any one position may not include all of the listed examples nor do the listed examples include all functions that may be found in positions of this class.)

1. Receives, reviews, and completes job tickets to prioritize jobs and ensure billing data is collected.
 - a. Maintains electrical or paper logs.
 - b. Determines materials needed.
 - c. Selects the proper product producing equipment.
 - d. Documents type of work done, production materials used, and time spent.
 - e. Submits production documentation to supervisor.
 - f. Reports to supervisor the need for additional supplies or orders the supplies.
2. Serves the public to ensure proper support is provided to customers.
 - a. Explains printing processes and unit printing and duplication support capabilities.
 - b. Sells printed products.
 - i. Maintains a cash receipt book.
 - ii. Takes accumulated funds to accounting.
 - iii. Completes a collection report.
 - c. Keeps inventory of forms.
 - d. Contacts requesters to inquire about the job ticket instructions or to inform requestors to pick up finished product.
 - e. Operates automated help desk system.
3. Operates printing plate equipment to ensure the production of the best possible printed photos.
 - a. Shoots negatives and print plates.
 - b. Adjusts for enlargement or reductions.
 - c. Shoots halftone negatives.
 - d. Prepares laser polyester plates.
4. Operates manual and automated presses to ensure production of high quality one color and multicolor materials utilizing half-tone, screens, solids and the line copy.
 - a. Mounts and adjusts printing plates.
 - b. Adjusts rollers and pressure.
 - c. Installs covers.
 - d. Mixes ink solutions.
 - e. Loads paper and maintains paper stocks.

- f. Adjusts press to paper size.
 - g. Adjusts margins and flow of ink to inking rollers.
 - h. Adjusts feed and tension controls.
 - i. Runs samples.
 - j. Reduces paper jams.
 - k. Scores and perforates printed products.
 - l. Ensures product quality and the correct number of product copies.
 - m. Moves the printed materials to the next phase of completion.
5. Operates digital and non digital color and black and white duplicating machines, with or without server and associated software, to produce printed material according to requests.
 - a. Converts products from paper based to electronic media or from electronic media to paper based products for duplicating.
 - b. Adjusts duplication machine for paper size.
 - c. Loads paper or mylar velum and maintains paper and mylar velum stocks.
 - d. Adds toner and maintains toner levels.
 - e. Runs a sample.
 - f. Reduces paper jams.
 - g. Manipulates the appropriate controls for adjustments and production of copies.
 - h. Ensures product quality and the correct number of product copies.
 6. Operates blue print copier to ensure requests for blue prints are produced as requested.
 - a. Wears appropriate personal protective equipment to safely use ammonia.
 - b. Controls ammonia flow and refills container.
 - c. Adjusts controls for speed and paper size.
 - d. Monitors temperature.
 - e. Monitors water level and refills container.
 7. Performs preventative maintenance services on presses and duplicating equipment to ensure their operational readiness.
 - a. Cleans press and duplicating machine components.
 - b. Lubricates presses as prescribed in technical manuals.
 - c. Cleans the plate processor.
 - d. Makes minor adjustments.
 - e. Calls a serviceman for other repairs and services.
 8. Mounts oversized printed materials on foam core to ensure signs and charts have a rigid backing.
 - a. Orders and maintains stocks of materials.
 - b. Cuts foam core to desired size.
 - c. Places adhesive on foam core.
 - d. Mounts printed materials.
 - e. Laminates the products.
 9. Performs other work as assigned.

D. Reporting Relationships:

Reports to a supervisor. Does not supervise but may train or provide work direction to others.

E. Challenges and Problems:

Challenges include printing on cast-coated cover stock because the ink does not dry quickly on cover-stock; printing on oversized paper; ink bleeding; printing on NCR (No Carbon Required)

paper sets because registration is vital, performing multiple color printing because of the adjustment needed to register the colors; the type and quality of paper; and obtaining the proper exposure on negatives to produce quality plates.

Typical problems include working under deadlines yet producing high quality printed material; obtaining a proper ink setting so the ink is not too light nor too heavy; obtaining proper setting of formats and black and white or colors to match the paper and satisfy the customer.

F. Decision-making Authority:

Decisions include prioritizing job tickets according to dates requested; recommend printing techniques to enhance the quality of the product; the equipment to use, the control settings, the materials to use, and the printing or duplication techniques to use for completing the job requested, and making adjustments during production; determining whether a picture should be reproduced as a high quality photo or if the picture needs to be rescreened; calling a serviceman for machine repairs; and if the quality of a job is acceptable.

Decisions referred include any questions about unusual printing requests that need special attention or that may need to be printed by another state agency or contracted to a commercial printer; forms and special documents that need printing; scheduling conflicts; and ordering supplies and major items of equipment.

G. Contact with Others:

Daily contact with the supervisor to review work priorities; with internal staff about work flow; with staff at other state printing facilities for printing support; with faculty and print shop customers to coordinate the production of printed materials or sell printed materials; and occasional contact with repairmen to coordinate the repair of equipment.

H. Working Conditions:

Works in an environment of constant noise; with machines that have fast-moving parts that can catch fingers, clothing, or hair; is exposed to chemical fumes and odors used with printing and duplication equipment; job performance requires standing for long periods, stooping, crouching, kneeling, and stretching while working with the equipment as well as need to lift cases of paper weighing between 45 to 70 pounds.

I. Knowledge, Skills and Abilities:

Knowledge of:

- the operation and maintenance of offset simplex and duplex presses;
- printing techniques;
- the operation and maintenance of digital and non digital color and black and white duplicating machines;
- duplication techniques;
- inks and their application;
- types of paper and their reaction to different inks;
- computer hard and software.

Ability to:

- work effectively with others;
- understand and follow oral and written instructions;
- prepare offset plates;
- train others in printing methods;
- operate and maintain printing and duplication equipment;
- review print orders, determine materials needed, and produce a finished product;
- maintain records;
- lift 70 pounds.